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10/594,969	03/14/2007	Takashi Kadowaki	68600.000002	1288

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HUNTON & WILLIAMS LLP
INTELLECTUAL PROPERTY DEPARTMENT
1900 K STREET, N.W.
SUITE 1200
WASHINGTON, DC 20006-1109

EXAMINER	
STOICA, ELLY GERALD	
ART UNIT	PAPER NUMBER
1647	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/594,969	KADOWAKI ET AL.	
	Examiner	Art Unit	
	ELLY-GERALD STOICA	1647	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 April 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13* is/are pending in the application.

4a) Of the above claim(s) *1 and 8-13* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2-7* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *29 September 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *09/29/2006, 12/12/2006, 01/24/2007*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of inventions of group II (claims 2, 3 (in part), 4-7) in the reply filed on 04/02/2009 is acknowledged. The traversal is on the ground that the special technical feature of the adiponectin expression-inducing agent comprising the protein of the amino acid sequence of SEQ ID NO: 2 described in claim 1 is shared by all three Groups. This is not found persuasive because in the same claim 1 in the alternative, a second option is presented: a protein comprising an amino acid sequence with one or more amino acid deletions, substitutions, additions, or insertions in the amino acid sequence of SEQ ID NO: 2. As presented in the previous Office action, read in the broadest reasonable interpretation, the claim is anticipated by Schlegel et al. (WO/2002/10107512-2002; p. 151-152) which describe a protein (SEQ ID NO:22) which is 97% identical with the protein claimed in claim 1 and therefore meets the limitations of part (2) of the claim and therefore cannot form the basis of unity of invention.

2. With regard to the newly added claims 12 and 13, they are method claims as are the claims 8-11. As such, they may be entitled to rejoinder if the original product claims are deemed allowable, and if the products used in the method correspond exactly in breadth to the allowed products. Until then they are withdrawn from prosecution.

3. Claims 1-13 are pending, claims 1, and 8-13 are withdrawn as being drawn to non-elected subject matter and claims 2 -7 are being examined.

The requirement is still deemed proper and is therefore made FINAL.

Claim Objections

4. Claim 3 is objected to for containing non-elected subject matter, as it depends from claim 1. Appropriate correction is required.

5. Claim 4 contains the wording "quipped". It is presumed from the context that the word "equipped" was intended. Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 is indefinite because it contains the limitation "a DNA that hybridizes under stringent conditions with the nucleotide sequence of SEQ ID NO: 1." The best definition of stringent offered in the specification for DNAs that hybridize under stringent conditions "are DNAs that can hybridize with a DNA encoding KLF9 of SEQ ID NO: 1 by using the DNA or a fragment thereof as a probe. An example of the stringent conditions is [sic] conditions such as hybridization in 6.times.SSC and 40% formamide at 25.degree. C., and washing in 1.times.SSC at 55.degree. C...but they are not limited

thereto. " ([0059]). As such, the metes and bounds of the claim cannot be determined. The claim 3 depends on the claim 2 and is thus indefinite also.

The independent claim 4 is indefinite since it is not clear if the enhancer element has to be operably linked or attached to a reporter gene. Also, in the part (2) of the claim there are no upper limits to the additions, substitutions, deletions or insertions envisioned by the claim. As such, the metes and bounds of the claim could not be determined. Claims 5-7 are rejected as dependent from claim 4.

Claim 5 is further indefinite because there is no relationship stated between the subject matter of the independent claim 4 and the KLF-9- encoding DNA. Also, there are no boundaries to **a** KLF-9- encoding DNA. As such the metes and bounds of the claim could not be determined. Also there is no limit to the number of deletions, additions or substitutions.

Finally, both claims 4 and 5 are incomplete, there being no relationship between the elements of each claim.

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claim 3 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention. Specifically, the

claim is drawn to a preventive or therapeutic pharmaceutical composition for a metabolic disease or heart disease, wherein the composition comprises a DNA comprising adiponectin expression-inducing agent.

The factors considered when determining if the disclosure satisfies the enablement requirement and whether any necessary experimentation is "undue" include, but are not limited to:

1) nature of the invention, 2) state of the prior art, 3) relative skill of those in the art, 4) level of predictability in the art, 5) existence of working examples, 6) breadth of claims, 7) amount of direction or guidance by the inventor, and 8) quantity of experimentation needed to make or use the invention. In re Wands, 858 F.2d 731, 737, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988).

The specification discloses that the DNA encoding for the transcription factor Kruppel-like factor 9 (KLF9) when expressed *in vitro* or *in vivo* enhances adiponectin promoter activity specifically and dose-dependently. From these results Applicant suggests that, by administering a KLF9 (DNA or protein) agent to swollen hypertrophic adipocytes, one may treat metabolic diseases and cardiovascular diseases ([0008]). Also shown was the binding of the KLF9 to a 32 bp promoter region of adiponectin in nuclear extract of mouse 3T3L1 cells (example 7).

The prior art was aware of the role of adiponectin in metabolic diseases. For instance a method for treating a disease state associated with, for example, adiponectin polypeptide regulation or aberrant insulin sensitivity comprising administering an effective amount of an adiponectin polypeptide is taught by Cooper et al. (U.S. Pat. No.

7, 365, 170; col. 5, lines 26-33). With regard to use of a composition comprising the DNA claimed the only way to use it would be in gene therapy, which itself is unpredictable as evidence by a review article (Post et al. -Drug Discovery Today , 6, 769-770, 2001-).The specification has not taught appropriate vectors, means or modes of administration for use of such. Also, the administration of adiponectin does not enable the treatment of anything with DNA encoding adiponectin, as the issues of dosage etc. are much more complicated, and not predictable based on administration of the protein.

However, there is no art indicating the use of the KLF9 or DNA encoding it for the treatment of any disease, let alone preventing a disease and thus the use of the composition is unpredictable.

With regard to the prevention aspect of the claim, this standard is in reality very difficult to achieve because a whole battery of controls need to be present together with a strong causative effect between the factors involved. Further, one would have to be able to predict who would be in need of such prevention for each condition desired to be prevented. In the instant case there is no disclosed specific disease that is disclosed to be prevented by the use of the DNA claimed. The specification does not disclose any example of use of the DNA claimed for the treatment of any disease, let alone for the prevention aspect. There is no guidance in the specification how one will use the adiponectin agent in treating or preventing any disease but just a statement of the general intended use. While the introduction of the KFL9 encoding DNA might alter the adiponectin levels in cultured adipocyte, there is a high unpredictability if the

composition would have the same effect in vivo and from there if it would successfully treat a metabolic disease.

It is considered that the amount of experimentation needed to be performed for first successfully deliver, in vivo, the composition claimed, and then for the composition to have the intended effect of increasing the adiponectin levels and finally for the increase in adiponectin level to have an effect in treating a disease is extremely large.

Due to the large quantity of experimentation necessary to test if the DNA containing composition of the claim has any effect in treating any disease; the lack of direction/guidance presented in the specification regarding how the composition can be used against specific diseases; the absence of working examples directed to same; the complex nature of the invention; the state of the prior art which establishes the unpredictability of treatment and especially prevention of any disease with the composition claimed, undue experimentation would be required of the skilled artisan to use the claimed invention in its full scope.

9. Claims 2-7 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. The subject matter of the claim 2-3 refers to the Kruppel-like factor 9 (a transcription factor- represented by the DNA SEQ ID NO: 1) and the subject matter of claims 4-6 comprises the DNA of SEQ ID NO:5 (a regulatory

sequence of adiponectin/ACRP30) in conjunction with the DNA of SEQ ID NO:1 (in claims 5-7). Specifically, the independent claim 2 encompasses DNA that "hybridizes" under unspecified "stringent" conditions with the DNA of SEQ ID NO: 1.

To provide adequate written description and evidence of possession of a claimed genus, the specification must provide sufficient distinguishing identifying characteristics of the genus. The factors to be considered include disclosure of compete or partial structure, physical and/or chemical properties, functional characteristics, structure/function correlation, methods of making the claimed product, or any combination thereof.

As such the claim is drawn to a genus of DNAs that are described by functionality only. There is no clear description of the characteristics of the DNA envisioned other than that the "stringent conditions" defined very loosely in paragraph [0054] and [0059]. The best definition of stringent offered in the specification for DNAs that hybridize under stringent conditions "are DNAs that can hybridize with a DNA encoding KLF9 of SEQ ID NO: 1 by using the DNA or a fragment thereof as a probe. An example of the stringent conditions is conditions such as hybridization in 6.times.SSC and 40% formamide at 25.degree. C., and washing in 1.times.SSC at 55.degree. C...but they are not limited thereto. " ([0059]). Accordingly, in the absence of sufficient recitation of distinguishing identifying characteristics, the specification does not provide adequate written description of the claimed genus.

The other independent claim, claim 4 is drawn to a cell for screening for an adiponectin expression-inducing substance, wherein the cell carries a reporter gene that

is equipped with a DNA comprising a nucleotide sequence with one or more nucleotide deletions, additions, substitutions, or insertions in the nucleotide sequence of SEQ ID NO: 5.

The claim does not require that the nucleic acid has any particular conserved structure since it may contain any number of deletions, additions, substitutions or insertions in the SEQ ID NO: 5. The only the functional feature that it has an undisclosed enhancer element. However, because of the lack of any limitations to the alterations performed the functionality as an enhancer element may no longer apply for the gene of interest. Thus, the claims are drawn to a genus of nucleic acids that is defined only by partial functional features. To provide adequate written description and evidence of possession of a claimed genus, the specification must provide sufficient distinguishing identifying characteristics of the genus. The factors to be considered include disclosure of compete or partial structure, physical and/or chemical properties, functional characteristics, structure/function correlation, methods of making the claimed product, or any combination thereof. In this case, the only factor present in the claim is a partial functional property that allows the polynucleotide sequences to act as enhancers. The number of deletions, additions, substitutions or insertions that can be made in the initial SEQ ID NO: 5 make the sequence irrelevant. There is no indication of any particular portion of the SEQ ID NO: 5 that need to be conserved. Due to an undisclosed number of changes, the final polynucleotide sequence might not resemble the "starting" sequence at all. Accordingly, in the absence of sufficient recitation of distinguishing identifying characteristics, the specification does not provide adequate

written description of the claimed genus. Additionally, the description of one polynucleotide species (SEQ ID NO: 5) is not adequate written description of an entire genus of functionally equivalent polynucleotides.

Vas-Cath Inc. v. Mahurkar, 19USPQ2d 1111, clearly states that "applicant must convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession *of the invention*. The invention is, for purposes of the 'written description' inquiry, *whatever is now claimed"* (See page 1117). The specification does not "clearly allow persons of ordinary skill in the art to recognize that [he or she] invented what is claimed" (See *Vas-Cath* at page 1116).

With the exception of the sequence referred to above, the skilled artisan cannot envision the detailed chemical structure of the encompassed polynucleotides, and therefore conception is not achieved until reduction to practice has occurred, regardless of the complexity or simplicity of the method of isolation. Adequate written description requires more than a mere statement that it is part of the invention and reference to a potential method of isolating it. The nucleic acid itself is required. See *Fiers v. Revel*, 25 USPQ2d 1601 at 1606 (CAFC 1993) and *Amgen Inc. v. Chugai Pharmaceutical Co. Ltd.*, 18 USPQ2d 1016.

One cannot describe what one has not conceived. See *Fiddes v. Baird*, 30 USPQ2d 1481 at 1483. In *Fiddes*, claims directed to mammalian FGF's were found to be unpatentable due to lack of written description for that broad class. The specification provided only the bovine sequence.

Therefore, only an isolated nucleic acids consisting of the sequence of SEQ ID NOs: 1 and 5 but not the full breadth of the claim meets the written description provision of 35 U.S.C. §112, first paragraph. Applicant is reminded that *Vas-Cath* makes clear that the written description provision of 35 U.S.C. §112 is severable from its enablement provision (see page 1115).

Claims 5-7 are rejected as dependent claims.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claim 2 is rejected under 35 U.S.C. 102(b) as being anticipated by Hayashizaki Y, Data base entry "db_xref="FANTOM_DB:4632425M20" (submitted 2001/07/16). The result is result 1 in the Database search "20080721_155836_us-10-594-969-1.rst" which may be accessed in SCORE. The cDNA entry is 100% identical with the polynucleotide sequence of SEQ ID NO:1

```
FEATURES             Location/Qualifiers
     source          1. .3266
                     /organism="Mus musculus"
                     /mol_type="mRNA"
                     /strain="C57BL/6J"
                     /db_xref="FANTOM_DB:4632425M20"
                     /db_xref="MGI:2390492"
                     /db_xref="taxon:10090"
                     /clone="4632425M20"
```

```
                     /tissue_type="skin"
                     /clone_lib="RIKEN full-length enriched mouse cDNA
library"
                     /dev_stage="0 day neonate"
     CDS             533. .1267
                     /note="unnamed protein product; Kruppel-like factor 9
                     (MGD|MGI:1333856 GB|NM_010638, evidence: BLASTN, 99%,
                     match=972)
                     putative"
                     /codon_start=1
                     /protein_id="BAC26000.1"

  Query Match             100.0%;  Score 735;  DB 6;  Length 3266;
  Best Local Similarity   100.0%;  Pred. No. 8.9e-195;
  Matches  735;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps
0;


Qy        1 ATGTCCGCGGCCGCCTACATGGACTTCGTGGCTGCCCAGTGTCTGGTTTCCATCTCCAAC 60
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      533 ATGTCCGCGGCCGCCTACATGGACTTCGTGGCTGCCCAGTGTCTGGTTTCCATCTCCAAC 592

Qy       61 CGCGCCGCCGTGCCGGAGCACGGGGGCGCTCCGGAAGCCGAGCGGCTGCGACTACCTGAG 120
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      593 CGCGCCGCCGTGCCGGAGCACGGGGGCGCTCCGGAAGCCGAGCGGCTGCGACTACCTGAG 652

Qy      121 CGCGAGGTGACCAAGGAACACGGTGACCCGGGGGACACCTGGAAGGATTATTGCACGCTG 180
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      653 CGCGAGGTGACCAAGGAACACGGTGACCCGGGGGACACCTGGAAGGATTATTGCACGCTG 712

Qy      181 GTCACTATCGCCAAGAGCTTGTTGGACCTCAACAAATACCGACCCATCCAGACCCCCTCG 240
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      713 GTCACTATCGCCAAGAGCTTGTTGGACCTCAACAAATACCGACCCATCCAGACCCCCTCG 772

Qy      241 GTGTGCAGCGACAGTCTGGAGAGTCCCGATGAGGATATAGGATCCGACAGCGACGTGACC 300
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      773 GTGTGCAGCGACAGTCTGGAGAGTCCCGATGAGGATATAGGATCCGACAGCGACGTGACC 832

Qy      301 ACCGAATCTGGGTCGAGTCCTTCCCACAGCCCGGAGGAGAGACAGGATTCTGGCAGCGCG 360
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      833 ACCGAATCTGGGTCGAGTCCTTCCCACAGCCCGGAGGAGAGACAGGATTCTGGCAGCGCG 892

Qy      361 CCCAGCCCACTCTCCCTCCTCCACTCTGGAGTGGCTTCGAAGGGGAAACACGCCTCCGAA 420
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      893 CCCAGCCCACTCTCCCTCCTCCACTCTGGAGTGGCTTCGAAGGGGAAACACGCCTCCGAA 952

Qy      421 AAGAGGCACAAGTGCCCCTACAGTGGCTGTGGGAAAGTCTATGGAAAATCCTCCCATCTT 480
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      953 AAGAGGCACAAGTGCCCCTACAGTGGCTGTGGGAAAGTCTATGGAAAATCCTCCCATCTT 1012

Qy      481 AAAGCCCATTACAGAGTGCATACAGGTGAACGGCCCTTTCCCTGCACGTGGCCAGACTGC 540
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     1013 AAAGCCCATTACAGAGTGCATACAGGTGAACGGCCCTTTCCCTGCACGTGGCCAGACTGC 1072
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Qy       541 CTTAAAAAGTTCTCGCGCTCGGATGAGCTGACCCGCCACTACCGGACCCACACTGGGGAA 600
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      1073 CTTAAAAAGTTCTCGCGCTCGGATGAGCTGACCCGCCACTACCGGACCCACACTGGGGAA 1132


Qy       601 AAGCAGTTCCGTTGCCCACTGTGTGAGAAGAGATTCATGAGGAGTGACCATCTCACCAAG 660
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      1133 AAGCAGTTCCGTTGCCCACTGTGTGAGAAGAGATTCATGAGGAGTGACCATCTCACCAAG 1192

Qy       661 CATGCCCGGCGTCACACCGAGTTCCATCCCAGCATGATCAAGAGATCAAAAAAGGCTCTT 720
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      1193 CATGCCCGGCGTCACACCGAGTTCCATCCCAGCATGATCAAGAGATCAAAAAAGGCTCTT 1252

Qy        721 GCCAGCCCCTTGTGA 735
              |||||||||||||||
Db       1253 GCCAGCCCCTTGTGA 1267
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As such, the properties of the cDNA sequence are inherent to its structure, and the claim 2 is anticipated by the database entry.

12. Claims 4, 6 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Bougueleret et al. (U.S. Pat. No. 6,582,909)

The Sequence of SEQ ID NO: 5 of the instant Application is an enhancer element of the adiponectin gene. This sequence is 100% identical with the nucleotide sequence of the 5' regulatory region of the adipocyte specific APM1 gene (nucleotides 4623-4654) taught by Bougueleret et al. A regulatory sequence contains the promoter and the enhancer of a particular gene and is situated in the untranslated region of the gene.

Bougueleret et al. teach the APM1 (an alternative earlier name for adiponectin) genomic sequence, and particularly of both promoter and splice junction sequences, and this allows the design of novel diagnostics and therapeutic tools that act on lipid metabolism, and are useful for diagnosing and treating obesity disorders. Also taught

are recombinant vectors comprising any of the nucleic acid sequences described and in particular of recombinant vectors comprising the promoter region of APM1 as well as cell hosts comprising said nucleic acid sequences or recombinant vectors. The disclosure also encompasses methods of screening of molecules which modulate or inhibit the expression of the APM1 gene to indicate people at risk for diseases, including obesity-related diseases, as well as to identify people who would be candidates or non-candidates for a drug treatment, or a clinical trial (col. 3, lines 12-47).

Thus, the teachings of Bougueleret et al. anticipate the claims 4, 6 and 7

Conclusion

13. No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ELLY-GERALD STOICA whose telephone number is (571)272-9941. The examiner can normally be reached on 9:00-18:30 M-Th and 9:00-18:30 alternate F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Manjunath N. Rao can be reached on (571) 272-0939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lorraine Spector/
Primary Examiner, Art Unit 1647